OMNITERM 1.60 Addendum

Changes to manual of 03/26/82 and 1.52 Addendum of 12/28/81
For TRS-80 Model I/III with 32K and 1 Disk minimum
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Copyright 1982, 1983 David J. Lindbergh

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It is recommended that the new OMNITERM owner read the yellow OMNITERM User's Manual before reading this addendum. This addendum assumes familiarity with OMNITERM and the terms and concepts used to describe it. These are described in detail in the yellow user's manual.

This addendum describes the differences between OMNITERM 1.52 described by Release 3 of the OMNITERM User's Manual and the current version, OMNITERM 1.60. First, the changes made in version 1.53, released October, 1982 will be described:

OMNITERM 1.53 Changes

OMNITERM Version 1.53 includes two changes from version 1.52, neither of which affect the way the OMNITERM program is used.

The first and most significant of these changes is that OMNITERM's comm line input is now interrupt driven on the Model III TRS-80. This means that Model III OMNITERM can now receive information over the comm line at speeds of 1200 baud and faster without any need for nulls. The Model I TRS-80's RS-232 board does not include the necessary hardware to allow it to generate interrupts, so it is still subject to the same speed limitations as before. A new appendix F is included in this addendum that reflects these facts.

Secondly, we have changed the RS-232 signal conventions yet again. We do feel very foolish about the whole situation, but this latest change should make OMNITERM's notation for RS-232 control line signals consistent with other software and hardware, and with our own versions of OMNITERM for the TRS-80 Model II, 12, 16, and IBM Personal Computer. The new notation is included in an updated Appendix M, attached to this addendum.

OMNITERM 1.60 Changes

OMNITERM 1.60 includes many new features and many improvements to old features. These include full auto dial support for the Lynx modem as well as for the Microconnection and "smart" modems such as the Hayes and Radio Shack Modem II, expanded auto-signon length (now up to 255 characters), a new Christensen protocol error-correcting block file transfer program, a feature called "graphic quotes" that allow you to enter control characters and pauses into the auto-signon string, stored phone number and prompt string, a new "auto-start" feature that allows OMNITERM to dial up a remote computer and sign-on to it with the auto-signon string all from DOS, thus allowing you to use your file directory as a phone directory, a feature that allows OMNITERM to insert a pause before sending each line of a file that can be used to insert a pause after a prompt has been received, an improved CR/LF GROUPING function to allow simpler use with Western Union's EasyLink service, improved disk error handling, changes to the default UART settings to allow simpler use with most systems, changes to the Model I keyboard case handling, and more.

Re-booting Bug Fixed

Some users of OMNITERM 1.53 have noticed a problem where the Model III must be re-booted before running other software after using OMNITERM. We believe that this problem has been fixed.

New Default UART Settings

The default UART settings in OMNITERM have been changed to 8 data bits, 1 stop bit, and no parity. This change directly affects only Model III owners because OMNITERM still reads the switch settings on the Model I RS-232 board.

Model I owners however may want to change their switch settings to match the new OMNITERM defaults.

With the new settings, OMNITERM will still receive data sent to it with 7 data bits and even parity, but will "throw away" the parity bit in the From Comm Line table. When sending bytes, most systems will get parity errors when they see the data coming from OMNITERM in the new format, but this should not cause any problems because the data itself will still be correct. Some systems will however have problems with this, and for these we suggest you simply change the UART settings back to 7 data bits, 1 stop, and even parity.

This change has been made possible because OMNITERM's From Comm Line table now (by default) translates all bytes with values greater than 127 to their below-127 equivalents. It will make life easier for users of Radio Shack Modem IIs, and means that OMNITERM will be able to be used with more systems without need for changing the UART settings. Earlier versions of OMNITERM used default settings of 7 data bits, 1 stop bit, and even parity because this was (and is) the most common UART setting. However the changes to OMNITERM's From Comm Line table make it possible to use OMNITERM with most of these systems, as well as allowing OMNITERM to be used unchanged with systems that formerly required special UART settings.

UPPER/lowercase Changes on Model I

Previously Model I OMNITERM started up with the From Keyboard table set to allow lowercase characters to be sent normally, and uppercase to be sent only when the <SHIFT> key was held down, just as a typewriter normally works, and just the opposite from the way the Model I TRS-80 normally works. A setting file, UPPER/OMT was included to change this around for those who wanted it the other way around. This has been changed so that uppercase will now be normally sent, and lowercase sent only when the <SHIFT> key is pressed. This will help eliminate problems with "smart" modems such as the Hayes and the Radio Shack Modem II that accept commands only in uppercase, as well as eliminate confusion for users of Model I TRS-80s without lowercase mods. For those who want OMNITERM to work the old way, a setting file LOWER/OMT is included that sets up the From Keyboard table the way it was in older versions. Of course, Model III owners, and Model I owners using DOSes (primarily LDOS, NEWDOS and DOSPLUS) that allow <SHIFT>-0 (zero) case toggling will not need this, but can simply use this feature of their DOS.

Graphic Quote feature

When entering the auto-signon string, prompt string in O OUTPUT FROM BUFFER, and when entering the new stored phone number you can now use the "graphic quotes" to enter control characters and pauses. As you are entering one of these strings you may wish to place pauses or control characters, such as carriage returns or line feeds, into these strings. In the past this has been a problem because many control characters cannot be typed on the regular TRS-80 keyboard, and because the carriage return key is already used to indicate the end of the string. This was overcome by using special characters such as apostrophes and semicolons to indicate pauses and carriage returns, but this creates further problems when you want to use these characters as part of the string.

With the new graphic quotes, you instead use the <DOWN-ARROW> key to generate an "opening graphic quote", then type the decimal or hex code for the control character, or one or more of the letter P for pauses (about 2 seconds for each P), and then the <DOWN-ARROW> key to make a "closing graphic quote". You can then either press <ENTER> to end the string, continue with more characters in the usual way, or enter another control character by using the graphic quotes again. Although we cannot print the graphic quotes on paper, we will use the left-bracket ([) character to show an "opening graphic quote" and the right-bracket (]) character to show the "closing graphic quote" in these examples. Remember, both graphic quotes are made with the <DOWN-ARROW> key.

For instance, the code for carriage return is 13 decimal, or 0D hex. To enter a carriage return for your prompt you would type <DOWN-ARROW>, 13 (or 0DH, with the H on the end for Hex), and then <DOWN-ARROW> again. This would look like:

```
        [13]  (in decimal)          [0DH] (in hex)
```

A possible auto-signon string might look like this:

```
[13][P][13][P]DECWR[13][P]C 301 24[13][PPP]ID TCA000 PASSWORD[13]
```

Which would send two carriage returns (code 13 decimal) followed by pause, the string "DECWR", a carriage return and pause, the string "C 301 24", a carriage return and three pauses, the string "ID TCA000 PASSWORD" and a carriage return. This might be a typical auto-signon string for the Source through TELENET.

Note that you cannot mix control characters and pauses in the same set of graphic quotes, nor can you have more than one control character in the same set of quotes. You can however have more than one pause in a set of graphic quotes. Due to the nature of the individual functions, you cannot put pauses in OMNITERM's prompt string (pauses here would be meaningless since the prompt string is sent by the remote computer, not OMNITERM) and you cannot put control characters in a phone number (only the digits 0 to 9 can be dialed). There will be more details on the use of the graphic quotes under each of these topics below.

O OUTPUT FROM BUFFER Changes

Two major changes have been made here. First, with the graphic qutoes you can now enter control characters as part of the prompt string that OMNTERM will wait for before sending each line. When you press the O OUTPUT FROM BUFFER command, OMNITERM will ask you for the prompt to wait for:

```
        Enter your prompt string.  If none, just hit <ENTER>.
        Use [ and ] to enclose control characters -->
```

You may type in the prompt, with control characters using the graphic quotes, or press <ENTER> for no prompt string as before. Note that you can now type semicolon (;) and it will <u>not</u> be changed to a carriage return, but simply used as a semicolon.

The other change made to O OUTPUT FROM BUFFER is that there is now an option to have OMNITERM wait a preset amount of time before sending each line. This can be used to make OMNITERM wait a certain amount of time after receiving the prompt, or simply to generate a pause between lines even where the prompt wait feature is not used. This makes it much easier to send files to systems like most IBM mainframes that send the prompt a little bit before they are really ready to receive a line. After you have answered the question about the prompt string, OMNITERM will ask:

```
Enter time before each line (0 to 255) ----->
```

Here you may enter a value for the amount of time you want OMNITERM to wait before each line. Experimentation will tell you how much time you need for a particular application. If you want no pause, just answer 0 or press <ENTER> in response to the question.

Finally, the question that asks for a pause between characters is still asked next, and has not been changed.

G CR/LF GROUPING Changes

This function has been changed so that OMNITERM will work directly with Western Union's EasyLink service. When GROUPING is ON, OMNITERM will now send a LF with every CR you type or that comes from a disk file. In addition, when both GROUPING and ECHO are ON, OMNITERM will respond by adding a LF to every CR that is received over the comm line. Thus we recommend using both ECHO ON and GROUPING ON when using Western Union EasyLink.

Error handling changes

In the past when disk I/O errors occurred in OMNITERM it would print the DOS error message and wait for you to press any key. This is still true, except that now when OMNITERM is waiting for you to hit any key it prints the message:

```
Hit any key...
```

M MODEM Type changes

OMNITERM now supports three types of modems: RS-232 based, the Microconnection modem, and the Lynx modem. Any one of these three can be chosen with the M MODEM system command by pressing it until the one you want is selected. The three types are shown on the screen as RS232 (for any modem that works through the RS-232 port such as a Hayes, Radio Shack modem, etc.), MCONN (for the Microconnection modem. Note that this was shown as MICRO in earlier versions of OMNITERM. This has been changed to avoid confusion with other modems that also have the phrase "micro" in their names), or LYNX. Whenever you start OMNITERM or change modem types, be sure that the modem you want to use is connected and turned on. If it is not, OMNITERM may assume that the modem is not available and not properly initialize it. Also, the Lynx modem must be set to use the same port (port 232 decimal) as the Radio Shack RS-232 board if you want it to work with OMNITERM.

Support for the three types of modems include the appropriate drivers for each (in the past there were problems with the Lynx on the Model III because the Lynx does not allow interrupts as does the Model III RS-232 board) and full auto-dial capability.

Auto dial and auto-signon features

The old A AUTO SIGNON and P DIAL PHONE system commands have been combined into one new system command, A AUTO-SIGNON AND AUTO-DIAL. When you press A for this command, you will get a new sub-menu that will show you the current auto-signon string and current stored phone number. The stored phone number (and all references to dialing the phone) refers only to the Microconnection and Lynx modems. To dial "smart" modems such as the Hayes and Radio Shack Modem II, you can send the dialing commands from the auto-signon string or normal mode. This will be described further when the auto-signon string and auto-start are discussed.

This sub-menu shows the current auto-signon string and stored phone number, and includes commands to change the auto-signon string (A for Auto-signon), change the stored phone number (P for Phone), dial the stored phone number (D for Dial), and toggle the phone connection on and off (T for Toggle). From this sub-menu you may enter any of the above commands, or press <BREAK> to return to the system command menu.

Pressing A in the sub-menu allows you to change the auto-signon string. The auto-signon in OMNITERM 1.60 can now be as long as 255 characters, and pauses in the auto-signon string are now longer in duration, up to about two seconds each, so that less repetition of pauses should be needed. In addition, control characters as well as pauses can now be entered into the auto-signon string using the graphic quotes described earlier.

When entering the phone number, you may tell OMNITERM to pause while dialing the phone by using the graphic quote feature. The only valid characters that OMNITERM will use when dialing is the digits 0 through 9 and pauses. Any other characters (letters, punctuation) will be ignored by OMNITERM when dialing. This means you are free to add spaces and punctuation to the phone number, as well as a short note describing who the number calls. Since the stored phone number may be up to 32 characters in length there should be room for a complete international phone number with pauses, or a local phone number with a short description. For instance, the phone number for your local TELENET node might be:

```
TELENET  9 [P] 754-9451
```

Where "TELENET" indicates who you are calling, the 9 is the initial 9 to get out of a centrex telephone system, a pause to get an outside line, and then the complete phone number. For most direct dial systems pauses will not be needed.

To dial the stored phone number, just choose D from the menu. The number will be dialed and you will be returned to OMNITERM's normal mode to communicate with the called system. When you dial a number, make sure the Lynx is set to "Talk" (if you have a Lynx) and make sure that the

Microconnection is set to "Data" (again, if you have one). When you dial a number OMNITERM will automatically hang up the phone for a couple of seconds, then pick it up and wait a few more seconds for a dial tone, then dial the number.

There is also a command to toggle the phone line. Press T to change from on-hook to off-hook (pick up the phone), or from off-hook to on-hook (hang up the phone). This insures that you don't have to worry about setting up the phone before dialing, and is an easy way to hang up when you are done.

Auto-start

With these new more powerful auto-signon and auto-dial features you can define all the elements of a sequence that will dial a phone number (with either the dial phone number command if you have a Lynx of Microconnection, or by placing the appropriate modem commands in the auto-signon string if you have a Hayes or other "smart" modem), wait for the far end to respond with a carrier, and sign on to the remote system. The feature that lets you tell OMNITERM to do all this automatically when you first enter OMNITERM is called "auto-start". After you have defined the phone number you want to call, the auto-signon string you want sent (don't forget to include pauses after dialing the phone to wait for the carrier), and any other settings appropriate for the system you want to call, you can return to the system command menu and press S for S SAVE OMNITERM SETTINGS. This function will then ask you:

```
Should the settings file do Auto-Start?
```

If you answer No, the function will then get the filename and save the settings just as in earlier versions of OMNITERM. If instead you answer Yes, the settings file will be saved with a special auto-start setting. Then when you later re-load the settings file from DOS with the "OMNITERM settings-name" command, OMNITERM will automatically dial the number and then send the auto-signon string. If you want you can force OMNITERM to load the settings file without doing this by holding down the <BREAK> key while OMNITERM is loading the file, or by using the L LOAD OMNITERM SETTINGS system command.

This auto-start feature allows you to make up a separate settings file for each system you want to call in this way, and thus actually use your file directory as a phone directory!. You will find this a very powerful and useful feature. When you are making up auto-signon settings for use with auto-start be sure you put in some pauses after dialing the phone to allow the phone system to connect you, and the other end to answer before the auto-signon is sent. If you are using a "smart" modem you should have no stored phone number, but instead put the appropriate commands to your modem in the auto-signon string, followed by some pauses and then your ID number, password, and whatever other information you want sent to the remote system.

OMNITERM Load & Save Settings file changes

Settings (/OMT) files made for one version of OMNITERM cannot be used with other versions of OMNITERM. OMNITERM 1.60 now checks that any settings file that you try to load was made with OMNITERM version 1.60, and not any other version. If you try to load a settings file that won't work properly

OMNITERM will give you the message:

```
Improper settings file.  Default settings will be used.
Hit any key...
```

ou may then press any key and OMNITERM will return to normal mode with full default settings in place, just as if you had used the C COLD OMNITERM RE-START special command. Changes have also been made to S SAVE OMNITERM settings to ask for the auto-start setting as described above.

File Transfer Protocol

Pressing F from the system command menu loads into OMNITERM a special file called OMNIXFER/CIM. Since this file loads into the disk I/O buffer area both input to buffer and output from buffer must be OFF before the file can be loaded. If you try to load this file while either input or output are ON OMNITERM will not load the file, but will give you an error message. Also be aware that any data in the disk I/O buffer will be destroyed by loading this file, so be sure to save any data in the buffer that you want to keep.

Once the file has been loaded, you will be in another program, OMNITERM's file transfer program. From here you can send or receive files of unlimited size using Chistensen protocol. This protocol is also known as MODEM, XMODEM, or CP/M protocol. The advantage of using this method of file transfer is that there are no limitations on file size, any errors in transmission are automatically detected, and the correct data re-transmitted, and files of any type, including binary and compressed files, can be transferred with no need to convert them to ASCII first. The main disadvantage of this transfer method is that it can only be used with computers that have a compatible program such as XMODEM, MODEM72, MODEM80, or others. Many microcompuers and bulletin boards support the Christensen file transfer protocol. Of course it can also be used with other TRS-80s using OMNITERM version 1.60 (or future versions).

When you enter the file transfer program you will see a short copyright notice and explanation of the program, and then be asked:

```
Do you wish to send or receive?
```

If you want to send a file, answer with S, or with R to receive a file. You will be asked the name of the file you wish to transfer, and the transfer will begin. As you are doing this, the computer on the other end of the connection must also get set up to transfer the file. In addition, both systems must be using the exact same UART settings for baud rate, stop bits, and parity. Because of the way the program checks for errors, the number of data bits must be 8. Any other value will not work. If you are communicating with another microcomputer user this is no problem as long as you have agreed who is sending, receiving, and the name of the file. If you are communicating with a bulletin board system or other host computer, you generally must send some commands to the other computer before you enter OMNITERM's file transfer program. You will have to get the information from the other computer on how to do this.

Normally the two programs, the sender and receiver, will need a few seconds to get "in sync" with each other. While this is happening the file transfer program will keep you updated on the status of things. The file transfer program breaks up the file into blocks of 128 characters, and then sends each block along with error-detection checksums. As the transfer proceeds the file transfer program will show the status of each block, and the upper right corner of the screen will show each byte as it is transferred. This flashing display informs you that the transfer is progressing normally. If there are problems with a block the program will automatically re-send it, with an appropriate message to the screen. If after 10 tries it cannot transfer a block it will give up and allow you to decide if you want to keep trying or quit.

Should you have trouble transferring files this way, it is probably because the other computer is not running a compatible program, or it is not using the same UART settings including 8 bits, or you have not told the other computer to send (or receive) the file correctly.

Files supplied on the OMNITERM disk

The files supplied on your OMNITERM disk are:

OMNITERM/CMD	The OMNITERM program itself.
OMNIXFER/CIM	The file transfer program called from OMNITERM. This program cannot be used by itself, but only from within OMNITERM. If you try to call up this program from OMNITERM but it is not available on the disk, OMNITERM will give you an error message.
OMNIXFER/CMD	The file transfer program in a form that you can run directly from DOS. This program works exactly the same way that OMNIXFER/CIM does, except that it can be run from DOS without using OMNITERM, and exits back to DOS. Note that this program does not set the UART, so you must have used OMNITERM to set up the UART before running this program.
LOWER/OMT	A settings file for use with the Model I that reverses the keyboard case so that lowercase is normally typed, and uppercase is used only when the <SHIFT> key is pressed.
DJNS/OMT	The sample settings file for Dow Jones News Service for use with the Model I.
DJNS3/OMT	The sample settings file for Dow Jones News Service for use with the Model III.
MNET/OMT	The sample settings file for the CompuServe MicroNet system, for the Model I.
MNET3/OMT	The sample settings file for the CompuServe MicroNet system, for the Model III.
SOURCE/OMT	The sample settings file for the Source and the Model I.
SOURCE3/OMT	The sample settings file for the Source and the Model III.
BINHEX/CMD	The binary to hex conversion program.
HEXBIN/CMD	The hex to binary conversion program.
BINERR/CMD	The binary to error format conversion program.
ERRBIN/CMD	The error format to binary conversion program.
TEXTED/BAS	The BASIC text editor program.

Appendix M - RS-232 Signal Conventions

In order to eliminate confusion, for the purposes of OMNITERM and this manual, the RS-232 signal conventions that we use are as follows:

When OMNITERM, or this manual, says an RS-232 control line is ON, this means that the line is HIGH, or set to a positive voltage. For the purpose of controlling RS-232 devices this means that the RS-232 line is active, or true. For instance if OMNITERM says that the CD (carrier detect) line is ON, this means that the modem is in fact detecting a carrier.

When OMNITERM, or this manual, says an RS-232 control line is OFF, this means that the line is LOW, or set to a negative voltage. For the purpose of controlling RS-232 devices this means that the RS-232 line is disabled, or false. For instance if OMNITERM says that the RI (ring indicator) line is OFF, this means that the telephone is NOT ringing, or at least that the modem doesn't think it is.

OMNITERM Tips - Revised 09/21/82

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Before you call for help:

TROUBLE BOOTING OR RUNNING OMNITERM??

Model III owners, did you CONVERT the OMNITERM disk to double density? OMNITERM is delivered on a Model I disk, and must be converted to double density with the TRSDOS CONVERT utility. You don't have to convert BASIC/CMD or other files that are duplicated on both disks since these are Model I TRSDOS programs that are already duplicated in Model III TRSDOS. Once you have the OMNITERM disk converted for your system, just type "OMNITERM" to run it. See the yellow OMNITERM manual for more details.

CONFUSED ABOUT CONVERTING OMNITERM TO MODEL III??

Later versions of Model III TRSDOS do not have seperate BACKUP/CMD, FORMAT/CMD, and other files, so CONVERT will not ask you about them. This is normal, and does not indicate any problem.

SEEING GRAPHICS AND OTHER "GARBAGE" ON YOUR SCREEN??

Be sure your UART is set to 7 data bits, 1 stop bit, and Even parity, as described both in the OMNITERM manual and in Radio Shack's Model I RS-232 manual. If you use 8 data bits you will get garbage with most systems. Please if you are having this problem try the above settings before you call us, even if you think the computer you want to talk with needs 8 data bits.

CAN'T GET YOUR MODEM TO DIAL THE PHONE??

Your modem won't dial the phone when you use the P DIAL TELEPHONE system command? Remember this is designed to work only with the Microconnection modem with the optional Auto-dial feature. Do not expect it to work with other brands of modem or with a Microconnection without the Auto-dial feature. Some "smart" modems allow you to dial the telephone by sending them characters from OMNITERM's normal mode. Check your modem manual to find out if yours has this feature and how to use it.

HAVING TROUBLE GETTING YOUR LYNX MODEM TO WORK??

OMNITERM is made to use the Lynx modem only when the Lynx is addressed to the same ports as the Radio Shack RS-232 board. Most Lynx modems are shipped from the factory set to a different address, appropriate for the Lynx communications software. If you want to use OMNITERM with your Lynx you must change the switch settings on the back of the Lynx to address it to the same location as the Radio Shack RS-232 board. This means that you cannot have both a Radio Shack RS-232 board and the Lynx (set to the same address) connected to your TRS-80 at the same time. You can have one or the other, but not both. For more information consult your Lynx manual, or contact the Emtrol (Lynx) factory.

HAVING TROUBLE WITH YOUR HAYES SMARTMODEM??

The Hayes can be dialed only with commands sent to it from the keyboard, as described in the Hayes manual. These commands must be sent in UPPER CASE letters, as the modem will not recognize lower case. Model I TRS-80's normally send lowercase characters unless you press the <SHIFT> key. This is just like on a normal typewriter keyboard, but is reversed from the usual Model I mode of operation. Model I TRS-80's without lower case modifications will also do this, but you will see the lowercase characters as UPPERCASE.

This can cause confusion because it appears that the Hayes is not responding to proper commands, when in fact the commands are in lower case and this is what is causing the problem. The solution is either to hold down the <SHIFT> key so upper case characters are sent, or to load the UPPER/OMT file into OMNITERM to reverse the keyboard action. Consult the yellow OMNITERM manual for details on this.

HAVING TROUBLE DIALING YOUR RADIO SHACK MODEM II??

The Radio Shack Modem II will accept commands only when your UART is configured for 8 data bits, 1 stop bit and no parity. As noted earlier, most computer systems cannot use these settings, so to dial with the Modem II you must change your UART settings, dial the phone, and then change them back. This is an unfortunate design fault of the Modem II.

HAVING TROUBLE SENDING SCRIPSIT OR BASIC FILES??

Be sure you save the file from BASIC or SCRIPSIT with the ",A" option so it will be in standard ASCII. Otherwise these programs will use a special compressed format that other computers will not understand and that will look like garbage on your screen. See your BASIC or SCRIPSIT manual for details.

TROUBLE LOADING RECEIVED BASIC PROGRAMS??

Getting "DIRECT STATEMENT IN FILE" errors when trying to load a BASIC program? Check for garbage in the file with the TEXTED/BAS program. Often there are stray messages at the beginning or end of a program that you mistakenly saved with the program. Other times long lines in BASIC are broken up into two smaller lines before being sent. You must repair them with the TEXTED/BAS program before you can use the program. Don't forget that files in TEXTED/BAS start with 0, not 1, so check that first line too!

IS YOUR CURSOR FLASHING PAST AT THE BOTTOM OF THE SCREEN??

If your cursor is flashing quickly across the bottom of your screen, and you are unable to do anything else with OMNITERM, this is the classic symptom of RS-232 board hardware problems. Your RS-232 board is almost certainly either missing, broken, or loose. (If you have a Lynx modem addressed to the wrong location and no RS-232 board you will also have this problem, since as far as OMNITERM is concenred your RS-232 board is missing.) This can happen on either Model I or Model III TRS-80's. On the Model I the connector between the expansion interface and the RS-232 board is often the problem, and you might be able to fix it by gently moving the board and/or connector. If this does not work the only solution is to take your computer back to Radio Shack for repair. Note that sometimes you can have this problem even when the RS-232 board works correctly with other software. This is usually because some software does not make use of all the functions of the RS-232 board.